ULSTER COUNTY
DEPARTMENT OF HEALTH

300 Flatbush Avenue, Kingston, NY 12401-2740, (845) 340-3150, Fax (845) 334-8337

MICHAEL P. HEIN
County Executive

CAROL M. SMITH, MD, MPH
Commissioner of Health

PERMIT TO CONSTRUCT A SWIMMING POOL

FEE SCHEDULE

- 25,000 gallons capacity	$100.00
+25,000 gallons capacity	$150.00
+50,000 gallons capacity	$250.00

☐ Please make check or money order payable to: **Ulster County Commissioner of Finance**

ALL PERMIT APPLICATION FEES ARE NON-REFUNDABLE

☐ Please return engineering plans and Engineering Report (DOH-1309) and fee to:

Ulster County Department of Health
Environmental Health Services Division
300 Flatbush Avenue
Kingston, NY 12401-2740

NEW YORK STATE DEPARTMENT OF HEALTH
Division of Environmental Protection

Engineering Report for Swimming Pool Plans

Design Compliance with Subpart 6-1 NYS Sanitary Code

For Office Use Only

Computer # _____ **Date** _____

Section A

General:

1. Owner of Pool _____
2. Name of Pool _____
3. City, Town, Village _____ County _____
4. (Check One) New Pool ☐ Change to Existing Pool ☐
5. Type of Pool (check as applicable)

Indoor Pool ☐ 1 Outdoor Pool ☐ 2 Spa Outdoor ☐ 3 Spa Indoor ☐ 4

Wading Pool ☐ 5 White Water Slide ☐ 6 Wave Pool ☐ 7 Other ☐ 8

Movable Bottom Pool ☐ 9 Special Purpose Pool ☐ 10

6. Anticipated Date of Start of Construction _____
7. Estimated Date of Completion _____

Section B

Pool Configuration:

1. Type of Construction _____
2. Length _____ Width _____ Area _____
3. Shape: Rectangle ☐ 1 Square ☐ 2 L-Shaped ☐ 3 Z-Shaped ☐ 4

U-Shaped ☐ 5 Oval ☐ 6 Other ☐ 7

4. Depths Minimum _____ Maximum _____
5. Pool Capacity _____ gallons
6. Transition Slope Shallow to Deep End _____ In Shallow End _____

Section C

Bather Capacity:

1. Maximum Number of Bathers Permitted to Use Pool at One Time _____
   [(Shallow Area Less Than 5') ÷ 15 + (Deep Area Greater Than 5' Depth - 300 x No. of Diving Boards) ÷ 25]
2. Spa Bather Capacity: Area ÷ 10 = _____

Section D

Water Supply:

Water Source:

1. Drinking Water _____ 2. Water for Sanitary Use _____
3. Water Source for Swimming Pool Use _____
4. Quantity Available _____ gpm 5. Capacity of Fill Pipe _____ gpm
6. Method Used to Prevent Interconnection or Back Siphonage _____
7. Fill Pipe (describe method, size, location) _____

Section E

Deck Equipment

1. Ladders: Number _____ Locations _____
2. Physically Disabled Access ☐ Yes ☐ No If yes, describe _____
3. Diving Boards _____ft. Above Water, Depth of Diving Area _____ft., Length _____
   _____ft. Above Water, Depth of Diving Area _____ft., Length _____
   Water depth under starting blocks _____ft.
4. Deck Slide Location _____
5. Location of 4" Stripe _____
6. Depth Markers: Spacing _____ Height of Numerals _____ Material _____
7. Fencing/Barrier Height _____ft.
8. Max. Opening Verticals/Horizontals/Under Fence _____
9. Self-Closing Gates ☐ Yes ☐ No
10. Positive Latching Device ☐ Yes ☐ No
11. Height of Latch Above Grade _____ inches
12. Elevated Lifeguard Chairs: No. & Location _____
13. Recessed Steps: Riser _____ inches Tread _____ inches
14. Stairs: Tread _____ inches Riser _____ inches

Section F

Recirculation Equipment

1. Recirculation Pump:
   Make _____ Model # _____ Turnover $\frac{\text{gals. capacity}}{\text{gpm x 60}}$ = _____ hrs.
2.

Pipe Material	Main Drain Suction Pipe	Inlet Pipes	Main Drain Grate
_____	Size _____	_____	_____
_____	Length _____	_____	_____
_____	Velocity _____	_____	_____

3. Head Loss Computations, Pump Curve (attached) ☐ Yes ☐ No
4. Hair Catcher: Pipe Size _____ Basket Diameter _____ Depth _____
5. Vacuum Cleaner: Make _____ Type _____ Piping Size _____ Hose Length _____ ft.
6. Filters
   Type _____ Make _____ No. _____ Filter Medium _____
   Area Each Filter _____ x _____ x _____ = _____ sq. ft. Total Area _____
   Filtration Rate $\frac{\text{gpm}}{\text{sq. ft.}}$ = _____ gpm per sq. ft. Backwash Rate $\frac{\text{gpm}}{\text{sq. ft.}}$ = _____ gpm per sq. ft.
   Body Feeder Capacity (D.E.) _____
7. Pressure Gauges _____ 8. Rate Controllers _____ 9. Flow Meter: Make _____ Model # _____
10. Inlets
    No _____ Spacing _____ Depth _____ Size _____ Adjustable _____
    Make _____ Model # _____

Section G

Pool Waste Drain

1. Pipe size _____ Length _____
2. Grate Opening Area (sq. in.) _____ Number of Grates _____
3. Length of Time Needed to Empty Pool _____
4. Describe Arrangement for Backflow Prevention _____
5. Main Drain: Spacing _____ Distance from the Wall _____
6. Gutter Type _____ Size _____ Drain Spacing _____
7. Surge Capacity (provided computations) _____
8. Skimmers: Make/Model # _____ Number _____ Location _____
   Pipe Size _____ Flow Rate Through Skimmer _____
   Equalizer Lines Provided ☐ Yes ☐ No
   Deck Drain Spacing _____ Slope to Drain _____

Section H

Chemical Feeders and Test Equipment

1. Disinfection Chemical To Be Used _____
2. Describe Provisions for Chemical Storage _____
3. Make and Type of Feeder (Model #) _____
4. Capacity of Feeder _____
5. % Strength of Solution _____ Maximum Dosage _____ Point of Application _____
6. Operation Control
   Alkalinity Hardness Test Kit (Range) _____ Chlorine Residual Test Kit (Range) _____
   pH Test Kit (Range) _____ pH Control Chemical to be Used _____
   Make of Feeder (Model #) _____ Automatic deactivation device provided ☐ Yes ☐ No

Section I

Waste Disposal System

1. Describe Facilities for Sanitary Waste Disposal _____
2. Have Plans for Facility Been Approved? ☐ Yes ☐ No
3. Describe Facilities for Pool Waste Disposal (including point of discharge) _____
4. Filter Wash Water _____ 5. Scum Gutter Waste _____ 6. Vacuum Cleaner Waste _____

Section J

Bathhouse Facilities (Numbers Provided)

	Men	Women
Showers		
Lavatories		
Toilets		
Urinals		xxxx

Section K

Lifesaving Equipment

1. Lifesaving Equipment
   Lifeguard Chairs _____ Torpedo or Ring Buoys or Rescue Tube _____
   Reaching Pole _____ Spine Board _____
   Pocket Mask _____
2. First Aid: Commercially available First Aid Kit ☐ Yes ☐ No First Aid Room ☐ Yes ☐ No
3. Chlorine Gas Storage Location _____
   Self Contained Breathing Apparatus ☐ Yes ☐ No
   If Yes, Location _____

Section L

Electrical and Ventilation

1. Describe Arrangements for Ventilation _____
2. Underwater Lights:
   Number _____ Make _____ Model # _____
3. Deck Junction Box
   Number _____ Make _____ Model # _____
4. Underwriters' Certificate ☐ Yes ☐ No
5. Other Hazards (explain) _____
   _____
6. Overhead Illumination on Water Surface _____ ft. candles
7. Underwater Lights Watts/sq. ft. Provided _____
8. Ground Fault Circuit Interruptors Provided ☐ Yes ☐ No

Section M

Spas

1. Maximum Water Depth _____
2. Maximum Depth of Any Seat From Water Line _____
3. Steps: Tread Height _____ Riser Height _____
4. Deck Area Provided (Show Calculations) _____
5. Thermostatic Control: Make _____ Model _____
6. Alarm System/Timer ☐ Yes ☐ No
7. Air Induction System, Arrangement for Backflow Prevention _____
   _____
8. Warning Sign Area _____

Section N

1. Water Slides
   Minimum Operating Water Depth _____ Slide Flume Terminus _____
   Distance between sides of adjacent flumes _____ ft. Distance between side of flume and end wall _____ ft.
2. Special Purpose Pool
   Stair Step Riser _____ Step Tread _____ Hand Rail Height _____

INFORMATION:

THIS FORM IS INTENDED TO INCLUDE FEATURES PERTINENT TO THE DESIGN AND OPERATION OF A SWIMMING POOL. THE FORM SHOULD BE USED TO SUPPLEMENT THE NARRATIVE REPORT OF THE ENGINEER OR ARCHITECT IN THE TRANSMITTAL OF PLANS TO THE HEALTH DEPARTMENT.

Signature of Designing Engineer or Architect _____

Date _____

Address _____

_____

Professional Engineer's or Architect's License # (or apply seal) _____

Telephone Number _____

Swimming Pool Plan Review Check Sheet

NEW YORK STATE DEPARTMENT OF HEALTH
Division of Environmental Protection

Review of Compliance with Design Standard
Subpart 6-1, NYS Sanitary Code

Name of Pool	Location (town, village, city)	County

Check One ☐ New Pool ☐ Change to an Existing Pool

Type of Pool (Check as applicable)
☐ Indoor ☐ Outdoor
☐ Pool ☐ Spa ☐ Wading Pool ☐ Other (specify) _____
☐ White Water Slide ☐ Wave Pool ☐ Movable Bottom Pool ☐ Special Purpose Pool

Pool Size _____ x _____ , Area _____ sq. ft. Pool Capacity _____ gallons

		Yes	No	N/A	Comments
2.1	**1. Plan Submission**				
2.1	a. Plan submission complete (application, plans, specifications, eng. report)				
	b. Plans are readable, stamped, signed and dated by Professional Engineer or Registered Architect				
	2. Patron Use				
	Maximum number of bathers permitted				
3.2.1	a. Shallow area ÷ 15 = _____				
3.2.2	b. (Deep area - 300 x no. of boards) ÷ 25 = _____ Add (a+b) = Total _____				
3.2.4	c. Spa bather load Spa area ÷ 10 =				
4.0	**3. Construction Material**				
4.1	a. Inert, nontoxic, watertight and enduring				
4.2	b. Rounded corners at wall and floor intersection Pool surface light in color, smooth and easily cleanable				
5.3	**4. Bottom Slope**				
5.3	a. Bottom slope 1:12 in shallow end				
5.6	b. 1:3 in shallow to deep end				
5.6	**5. Diving Areas**				
5.6	a. Meets all requirements for depths, board length, diving envelope and clearances				
5.6.3	b. Handrails provided at all steps and ladders leading to diving boards one meter or above the water				
5.7	**6. Deck slides located at water depth not less than 4 feet**				
5.8	**7. Acceptable location and design of ladders, recessed steps and handrails**				
5.9	**8. Deck and drains**				
5.9	a. Five feet continuous deck around pool				
5.9	b. Impervious nonslip surface (no carpeting)				
5.9.1	c. Deck drainage slope at least 1/4 inch foot				
5.9.2	d. Drain spacing, location is acceptable				
5.9.2	e. Protection against back siphonage				
5.9.7	f. Adequate separation between food and deck areas				

Section		Yes	No	N/A	Comments
5.10	9. Fencing				
5.10.1	a. Opening in fence acceptable				
5.10.1	b. 4 foot minimum height				
5.10.4	c. No external handholds or footholds				
5.10.6	d. Self-closing and positive self-latching lockable gates				
5.10.6	e. Latch location				
6.1	10. Depth Markings				
6.1.1	a. Depth markings at wall or deck, spaced not more than 25 feet, at 2 foot increments of depth, maximum, minimum point, break point				
6.1.2	b. Numeral height 4 inches or more				
6.1.2	c. Color contrasting with background				
5.4	d. Floatline at 5 feet breakpoint				
5.4	e. 4 inch stripe of contrasting color at breakpoint or 5 foot depth				
5.4	f. On steps or underwater ledges				
6.2	11. Lifeguard chairs				
	Lifeguard chairs are adequate and location is acceptable				
6.3	12. Life Saving Equipment				
	Provided (min. 2 units of (a) & (b) below) Check those provided				
6.3.2	a. Torpedo buoy ☐, rescue tube with a 6 foot line ☐, ring buoy at least 18 inches in diameter, fitted with 1/4 inch diameter line with a length of 1.5 times the maximum width of pool or 50 feet, whichever is less.☐				
6.3.2	b. One reaching pole 15 feet long ☐				
6.4	c. Commercially available first aid kit ☐				
6.4	d. Spine board ☐				
6.4	e. Pocket mask ☐				
6.5	f. First aid room ☐				
7.0	13. Lighting, Electrical, Ventilation				
7.2.1	a. Wiring conforms to National Electrical Code				
7.2.1	b. Pool and metal fixtures properly bonded				
7.2.1.1	c. No overhead electrical wiring within 20 feet				
7.2.2	d. Ground fault interrupters provided				
7.1.1	e. Indoor pool - illumination over pool 50 foot candles, or with underwater lights, 30 foot candles				
7.3.1	f. Ventilation - two air changes per hour provided				
	14. Interconnections				
8.3	a. Minimum 6 inches air gap provided on fill pipe				
8.2	b. Approved backflow preventer installed on discharge side of last control valve fixture, device or appurtenance				
8.1	c. Water supply meets Part 5 of Code				
8.5	d. Backwash disposal is thru air gap				
8.5	e. Air gap provided between drain discharge and sewer				

Code Section		Yes	No	N/A	Comments
	15. Turnover and Piping				
9.0	a. Turnover rate is acceptable				
9.2.2	b. Suction line velocity is less than 6 ft./sec.				
9.2.2	c. Pressure lines velocity is less than 10 ft./sec.				
9.2.2	d. Piping details shown on plans				
9.4	e. Piping color coded				
9.5	**16. Overflow System**				
9.5.1	a. Gutters provided on (pools greater than 1,600 sq. ft.)				
9.5.1.1	b. Capable of removing 100% of recirculation rate				
9.5.1.3	c. Surge capacity acceptable				
9.5.2.4	d. NSF listed skimmers with equalizer lines provided				
9.5.2.1 & 9.5.2.2	e. Location and number of skimmers is acceptable				
	17. Main Drains				
	a. Minimum two drains provided; each designed to carry 100% of the recirculation flow				
9.6	b. Main drain(s) location is acceptable				
9.6.2	c. Suction velocity thru grate is less than 1.5 ft./sec.				
	18. Pumps				
9.7.2	a. Make and model #, H.P. _____ Capacity _____, @ Head _____ft.				
2.2.7	b. Pump curves and head loss calculations				
9.7.2	c. Pressure gauges provided				
9.8	**19. Flow Measurement and Control**				
9.8.1	a. Flow meter acceptable				
9.8.1	b. Location of flow meter in straight run of pipe				
9.8.1	c. Rate of flow controllers provided				
9.9	**20. Inlets**				
9.9.1	a. Placement and spacing acceptable				
9.9.3	b. Adjustable for direction and flow				
9.9.3	c. Flush with pool wall or floor				
10.0	**21. Filtration**				
	Filters meet standards of acceptability for: a. Type _____, Make _____, Model _____, Area _____ b. NSF Listed c. Filtration rate _____ d. Back wash rate _____ e. Pressure gauges				

Code Section	Description	Yes	No	N.A.	Comments
11.0	**22. Disinfection**				
	Meets standards of acceptability for:				
11.3 & 11.4	a. Chlorinator/brominator Number _____ , Type _____ , Make _____ , Capacity _____, Max Dosage _____ , NSF Listed _____				
11.5	b. Chemical Feeder Type _____ , Make _____ , Model _____ , Capacity _____ , Max Dosage _____ , NSF Listed _____				
11.3.2	c. Chemical storage, labeling				
11.2.1	d. Gas chlorine room location, cylinder storage, ventilation, air intake, SCBA, fan switch location acceptable				
11.5.1	e. OGE installed along with chlorine or bromine				
	f. OGE design is acceptable				
	g. Means to control off-gassing provided				
11.5.1.2	h. Corona discharge OGE uses vacuum system				
11.5.1.3	i. Backflow prevention provided for OGE				
11.6	j. Recirculation pipe length adequate to provide 5 second contact time				
11.6.1	k. CO2 equipment room location, cylinder storage, ventilation, air intake acceptable				
11.7	l. Automatic deactivation device provided				
11.8	m. Test kit provided				
12.3	**23. Bathhouse**				
	Meets standards of acceptability for:				
12.1	a. Dressing rooms				
12.4	b. Toilet facilities				
12.5	c. Showers				
14.0	**24. Spas**				
14.3	a. Acceptable design at steps and handrails				
14.7.2	b. Alarm system, thermostat control				
14.13	c. Warning sign				
14.11	d. Acceptable design of air induction system				
15.0	**25. Special Purpose Pools**				
15.3.1	a. Handicap access				
15.1.1	b. Water slides, plunge pool min. operating depth >3 feet				
15.1.2.1	c. Distance between sides of adjacent flume terminuses is 6 feet or greater				
15.1.2.1	d. Distance between side of flume and end wall is 5 feet or greater				
15.4.3	e. Movable bottom pool clearly lit and visible, depth sign provided				
15.2.1	f. Wave pools - turnover rate is acceptable				
15.6	**26. Starting Blocks**				
	a. Meets recognized competition design standards				
	b. Installed over a minimum water depth of 6 feet				

Completed by _____

name signature

date